UST Program Task Force

Draft Recommendations

TITLE: REVISION OF SWRCB RESOLUTIONS 68-16, 88-63 AND 92-49

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BACKGROUND:

1. Petroleum based motor fuel is the most common substance stored in Underground Storage Tanks (USTs). Petroleum naturally attenuates and degrades in the subsurface, limiting the extent of petroleum groundwater plumes.
2. State Water Board Resolution 88-63 requires, with few exceptions, that all groundwater be designated as a source of drinking water.
3. State Water Board Resolution 92-49 requires that cleanup levels be no greater than water quality objectives, which commonly interpreted to be drinking water Maximum Contaminant Levels (Primary and Secondary), Public Health Goals, National Aquatic Ambient Water Quality Criteria, and the Taste & Odor threshold for various constituents of concern
4. The water supply industry has long recognized that shallow groundwater is vulnerable to pollution from surface activities. For this reason, well standards have been in effect for decades that require sanitary seals and setbacks from common sources of pollution such as septic tanks and sewer lines.
5. Existing local zoning ordinances provide a mechanism to preclude improper activities at former LUFT sites.
6. The monetary cost of cleanup at many LUFT sites has exceeded the environmental and societal benefit obtained. There is also opportunity cost to society when many talented people spend their time investigating and monitoring releases from USTs that have little environmental impact.
7. Regulatory decision-making authority is widely dispersed to Regional Boards, Local Oversight Program (LOP) agencies, and other local agencies. Due to this dispersed authority, actual decisions at sites can vary widely and, at times, substantially deviate from the intentions of State Water Board policy.

RECOMMENDATIONS:

The members of the UST Cleanup Task Force recommend that the State Water Board modify existing policies or regulations, or seek other remedies, to effect the following actions:

1. Revise, amend, or provide guidance on Resolution 68-16 to:
    a. Recognize that the arbitrary establishment of Water Quality Objectives as the most stringent standard irrespective of probable use is not consistent with the maximum benefit of the people of the State;
    b. Recognize that the establishment of Water Quality Objectives that are not technologically or economically achievable is not consistent with the maximum benefit of the people of the State.

2. Revise, amend, or provide guidance on Resolution 88-63 to:
    a. Recognize that some groundwater in some locations, particularly shallow groundwater, does not have a reasonable probability of being beneficially used as a drinking water source.
    b. Recognize other existing sources of pollution in the area of the LUST site when determining the probability of GW use and the timeframe for that use.
    c. Allow alternative points of compliance that are consistent with the present and likely future use of groundwater.
    d. Recognize that irrespective of basin designation, it is inappropriate to regulate groundwater in the subsurface as a drinking water source where:
        i. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity);
        ii. There is contamination, either by natural processes or by human activity (unrelated to the specific pollution incident), that cannot reasonably be treated for domestic or municipal use using either Best Management Practices or best economically achievable treatment practices, or;
        iii. The impacted aquifer will not produce a sustained potable yield of 200 gallons per day.
    e. Allow site specific information to be considered when it is suspected that a designated beneficial use is unreasonable.

3. Revise, amend, or provide guidance on Resolution 92-49 to:
    a. Recognize that the principles of risk assessment should inform the decision making at LUFT sites. Natural attenuation processes should be given appropriate consideration when evaluating sources, pathways and receptors.
    b. Recognize the value of mass flux analysis when determining the likely impacts to a water supply well.

c. Consider the likely effect of natural attenuation when determining future impacts.